

Case report

報告者：Intern A 組 葉合體
徐儀廷, 李璋庭, 張媛婷

指導醫師：陳玉昆 主任 全體醫師
及口腔病理科全體醫師

General Data

Name : 000

Sex : Female

Age : 64 y/o

Native : 高雄市

Marital status : Married

Attending staff : 000醫師

First visit : 104/06/27 (口外)

Chief Complaint

2015/06/27 高醫口外初診

- A huge swelling mass over her right face preauricular area

Present Illness

2015/06/27 高醫口外初診

- This 64 y/o female patient had huge swelling mass over her right face preauricular area since 103/09. She went to 大同 hospital dental dept. for examination since 104/01. The Dr.000 referred her to our OPD for biopsy in 104/01, but the patient came to our OPD for biopsy today.

Personal History – past medical history

- Underlying disease: Parkinsonism
(routine follow up in 大同醫院神經內科)
- Hospitalization: 2011.04 in大同 hospital
- Surgery under GA: Total thyroidectomy
- Allergy: Denied
- Medication: Levodopa

Personal History – past dental history

- General routine dental treatment
- Attitude to dental treatment: Co-operative
- Risk factors related to malignancy:
 - Alcohol (-)
 - Betel quid (-)
 - Cigarette (-)
- Irritation: Denied

Personal History – past dental history

20150115

•She went to 大同 hospital dental dept. for treatment due to right face swelling. Dr.000 advised her to do biopsy in KMUH OS dept., but she hesitated.

20150623

•She went to大同 hospital dental dept. for treatment again and accepted to do biopsy in KMUH OS dept..

Extraoral Examination

- Pain (-)
- Mild tenderness (+)
- Lip numbness (-)
- No facial nerve damage was found
- MMO limitation (very mild)
- No obvious hearing loss was noted

Extraoral Examination

- Size: 12 x 8 cm in dimension
- Swelling over right pre-auricular area
- Consistency: Soft
- Bony destruction (+)
- Aspiration → fresh blood
- Hot sensation (-)

Intraoral Examination

- No obvious intraoral lesion was found
- Oral mucosa: Intact
- Consistency: Soft
- Color: Pink

Image Finding – Panorex (1040623)



There is an ill-defined unilocular, irregular shaped radiolucency without corticated margin over right mandibular ramus and angle area, extending from the right mandibular angle to condylar head and coronoid process and extending entire width of right ascending ramus, measured approximately 7 X 5 cm in diameter. The right mandibular bone expansion was observed and the distal border of right mandibular ramus disappeared. The condyle and coronoid process were destroyed. The right mandibular canal wall is invaded. Maxillary right posterior tuberosity destruction was also observed.

Image Finding – Panorex (104/06/23)



- Tooth missing: 17, 18, 28, 35, 36, 37, 46
- Prosthesis: nil
- Restoration: 18, 48
- Floating teeth:45
- Tooth elongation: 26

Image Finding - CT(104/06/26)

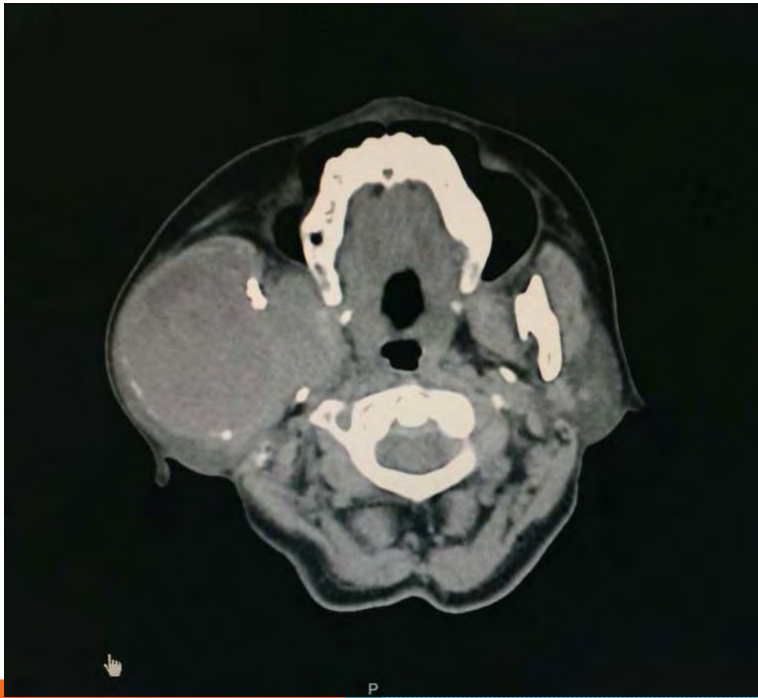


Image Finding – UltraSonic (104/07/07)



Working diagnosis

Working Diagnosis

Inflammation, cyst, or neoplasm?

Benign or malignant?

Central or peripheral?

Inflammation?

	Our case	Inflammation
Redness	-	+
Swelling	+	+
Local heat	-	+
Pain	-	+

	Our case	Cyst
Aspiration	Lots of blood	+
Fluctuation	-	+/-
Well-defined border	-	+
Bony expansion	+	+/-

Benign or malignant

	Our case	Benign	Malignant
Border	ill-defined	Well-defined	Ill-defined
Sclerotic margin	-	+	-
Destruction of cortical margin	-	+/-	+
Pain	-	-	+
Induration	+	-	+
Swelling with intact epithelium	?	+	-
Progress	Fast	Slow	Fast
Metastasis	May be	-	+/-

→ Our case is a

Differential diagnosis

- Mucoepidermoid carcinoma
- Adenoid cystic carcinoma
- Epimyoeepithelial carcinoma
- Carcinoma ex pleomorphic adenoma
- Rhabdomyosarcoma
- Neurofibrosarcoma
- Lymphoma
- Metastatic carcinoma

Mucoepidermoid carcinoma

	Our case	Mucoepidermoid Carcinoma	
Gender	Female	None	
Age	64y/o	20~70y/o	V
Site	Parotid gland Right ramus	Parotid gland Minor salivary gland(palate)	V
S/S	Swelling,painless	Usually asymptomatic, swelling or pain if high-grade	V
size	6X4 cm in diameter	Not mention	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Ill-defined unilocular irregular shaped radiolucency without corticated margin	V
Clinical features	Pain (-) Mild tenderness (+) Consistency:soft	Pain (-) Mild tenderness (+) Consistency:soft	V

Adenoid cystic carcinoma

	Our case	Adenoid Cystic Carcinoma	
Gender	Female	None	
Age	64y/o	Middle age	V
Site	Parotid gland Right ramus	Minor salivary gland	
S/S	Swelling, painless	Swelling, pain	
size	6 X 4 cm in diameter	Not mention	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Ill-defined unilocular irregular shaped radiolucency without corticated margin	V
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (+) Mild tenderness (+) Consistency: firm	

Carcinoma ex pleomorphic adenoma

	Our case	Carcinoma ex pleomorphic adenoma	
Gender	Female	F>M	V
Age	64y/o	>40 y/o	V
Site	Parotid gland Right ramus	Parotid gland Submandibular gland	V
S/S	Swelling, painless	Swelling, pain	
size	6 X 4 cm in diameter	Not mentioned	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Ill-defined multilocular irregular shaped radiolucency without corticated margin	
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (+) Mild tenderness (-) Consistency: firm	

Epimyoeplithelial carcinoma

	Our case	Epimyoeplithelial carcinoma	
Gender	Female	F:M=2:1	V
Age	64y/o	60~80	V
Site	Parotid gland Right ramus	Parotid gland	V
S/S	Swelling, painless	Swelling, painless	V
size	6X4 cm in diameter	Not mention	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Ill-defined unilocular irregular shaped radiolucency without corticated margin	V
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (-) Mild tenderness (-) Consistency: firm	

Rhabdomyosarcoma

	Our case	Rhabdomyosarcoma	
Gender	Female	male	
Age	64y/o	Middle age	V
Site	Parotid gland Right ramus	Floor of mouth Tongue	
S/S	Swelling, painless	Swelling, pain	
size	6 X 4 cm in diameter	Not mentioned	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Ill-defined unilocular irregular shaped radiolucency without corticated margin	V
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (+) Mild tenderness (+) Consistency: firm	

Neurofibrosarcoma

	Our case	Neuro-fibro-liposarcoma	
Gender	Female	None	V
Age	64y/o	30~60	
Site	Parotid gland Right ramus	Lips Palate	
S/S	Swelling, painless	Swelling, pain	
size	6X4 cm in diameter	Not mention	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Irregular shaped Radiolucency with radiopaque	
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (+) Mild tenderness (+) Consistency: firm	

Lymphoma

	Our case	Epimyoeplithelial carcinoma	
Gender	Female	None	V
Age	64y/o	15~35	
Site	Parotid gland Right ramus	Palate Gingiva	
S/S	Swelling, painless	Swelling, painless	V
size	6X4 cm in diameter	Not mentioned	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Ill-defined unilocular irregular shaped radiolucency without corticated margin	V
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (-) Mild tenderness (-) Consistency: firm	

Metastatic carcinoma

	Our case	Metastatic cancer	
Gender	Female	None	
Age	64y/o	None	
Site	Parotid gland Right ramus	Soft tissue bone	V
S/S	Swelling, painless	Swelling, pain	
size	6X4 cm in diameter	Not mentioned	
X-ray features	Ill-defined unilocular irregular shaped radiolucency without corticated margin	Varying	
Clinical features	Pain (-) Mild tenderness (+) Consistency: soft	Pain (+) Tenderness (?) Consistency: ?	

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Treatment course

Treatment course

◇ 2015/07/04 高醫牙科

- Suspect malignancy metastatic tumor over right parotid area → suspect thyroid origin

Imp:

Malignancy tumor over right parotid area suspect thyroid origin

Plan:

- Referred to Dr. 000 for further management
- According to CT → tumor invasion to infratemporal fossa and skull base very high risk for Wide excision over right parotid area

Treatment course

◆ 2015/07/07 大同一般外科

Assessment & Plan

- Metastatic lesion from thyroid to right parotid gland
- Elevated Tg local radiation first and excision later and radioactive iodine later on surgical hypothyroidism stage IV C

Treatment course

◆ 2015/07/17 大同放射腫瘤科

Plan

- Elevated Tg Local radiation is suggested CT sim:
7/20 9am 7000 cGy/35fx to R't parotid gland,
involved R't mandible, and R't cheek.

Treatment course

◇ 2015/08/13 大同癌症多專科整合門科

Objective finding:

- Skin: Grade I dermatitis
- Erythema xerostomia (+)
- Anorexia: (+)
- Oral cavity: Grade I mucositis

Plan

- Keep on RT

Discussion

Discussion

Journal

Direct spread of thyroid follicular carcinoma to the parotid gland and the internal jugular vein : case report

Ahmed Alzaraa,¹ Jason Stone,² Glyn Williams,³ Irfan Ahmed,¹ and Mohammed Quraishi¹

J Med Case Reports. 2008; 2: 297.

Published online 2008 Sep 9. doi: [10.1186/1752-1947-2-297](https://doi.org/10.1186/1752-1947-2-297)



Introduction

- Thyroid carcinoma sometimes shows a microscopic vascular invasion, but gross angioinvasion with intraluminal thrombosis is extremely rare
- Very few cases about metastasis of thyroid cancer to the internal jugular vein, and fewer cases about metastasis to the parotid gland have been separately reported
- Our patient has both these organs involved by direct spread from a thyroid follicular carcinoma

Case representation

- A 78-year-old woman was seen in the otolaryngology clinic in June 2006 with a painless swelling at the angle of the left side of her jaw which had been present for 9 months



Case representation

- The mass had slightly increased in size over this period. The patient had tinnitus but no other complaints
- Clinical examination revealed a smooth, soft lesion in the tail of the left parotid gland



Case representation

Examination:

1. **Ultrasonic of neck** : swellings in the left parotid gland and the left thyroid lobe
2. **Fine needle aspiration(FNA)**: shows thyroid follicular cells (from left parotid gland)
3. **MRI of neck**: confirmed both soft tissue masses with extensive thrombosis of the left internal jugular vein contiguous with the primary tumour

- Subsequent FNA of the left thyroid lobe and the internal jugular vein (IJV) revealed thyroid follicular cells similar to those seen in the first FNA.

Case representation

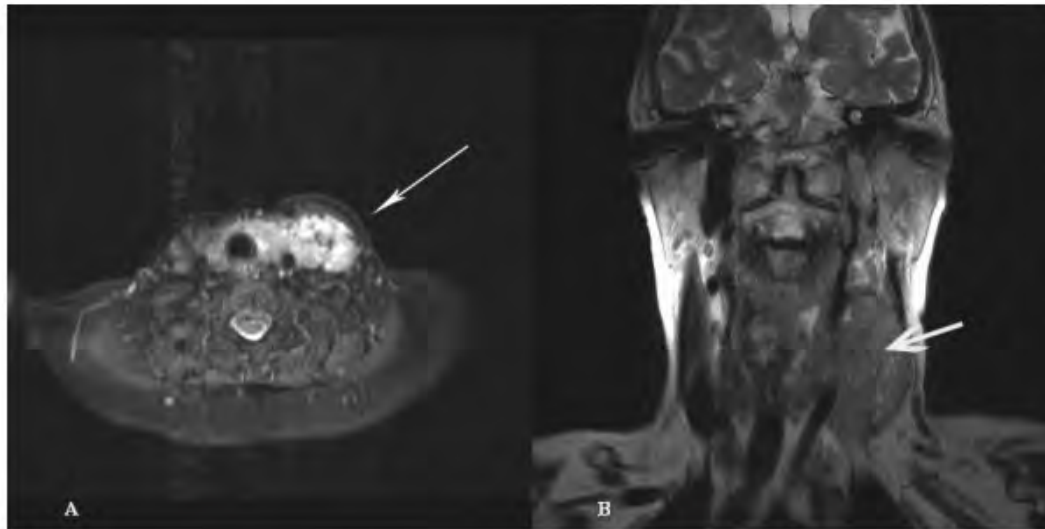
Fine needle aspiration (FNA)

- The cells were **positive for thyroglobulin and thyroid transcription factor 1** and **negative for chromogranin and synaptophysin** on immunohistochemistry, confirming the diagnosis of a thyroid follicular carcinoma



Case representation

Figure 1

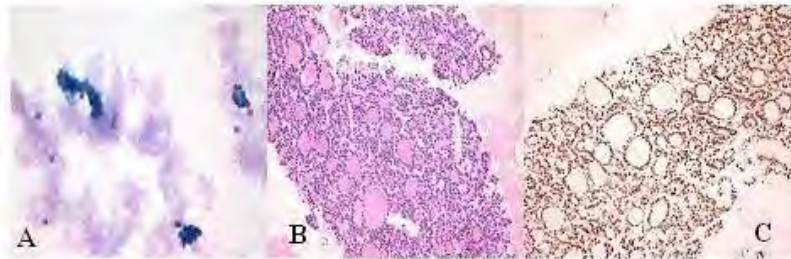


Coronal T2 weighted image (A) and STIR sequence (B) showing left thyroid tumour extending directly into the left internal jugular vein.

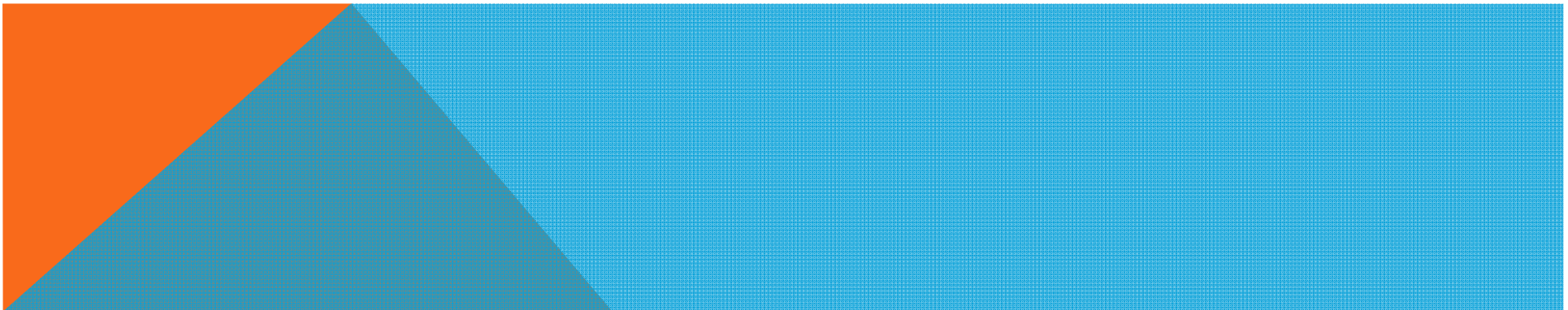


Case representation

Figure 2



Parotid aspirate (A & B) showing thyroid follicular cells. Nucleus positive immunohistochemistry for Thyroid Transcription Factor-1 confirms thyroid origin (C).



Discussion

- Invasion of the parotid gland and the great cervical veins from a thyroid cancer is extremely rare, and is mostly detected at autopsy
- Two general types of metastases should be distinguished in metastatic salivary gland tumours:
 1. Regional metastases (head and neck)
 2. Distant metastases

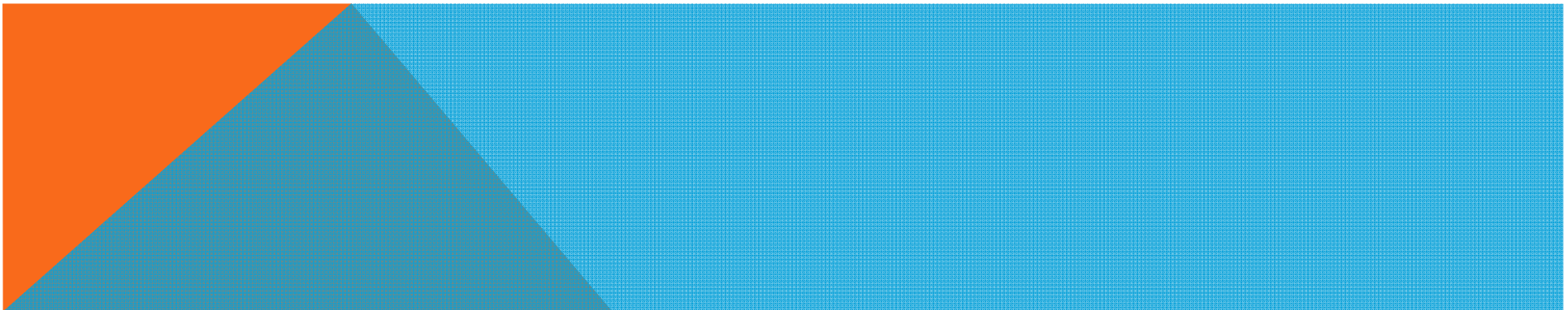
Discussion

- Involvement of the parotid gland by invasion or spread by metastases from malignant tumors in the head and neck is uncommon
- Exception : melanoma of the temple, scalp and ear, and anaplastic squamous cell carcinoma of the ear and ear canal



Discussion

- Seifort et al. reported three cases of a metastatic thyroid cancer to the parotid in their analysis of 108 cases of secondary metastases to salivary glands
- Another case was found by the Pack Medical Group among 81 cases of parotid gland involvement as a secondary extension of malignant tumors



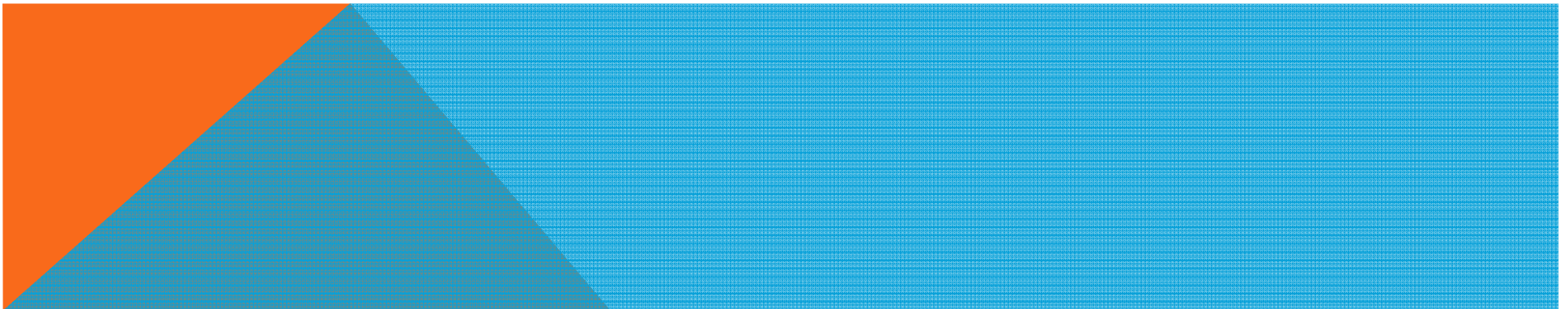
Discussion

- It is more common for the parotid gland to be involved as an incidental part of a generalized metastatic disease rather than a site of isolated metastasis.



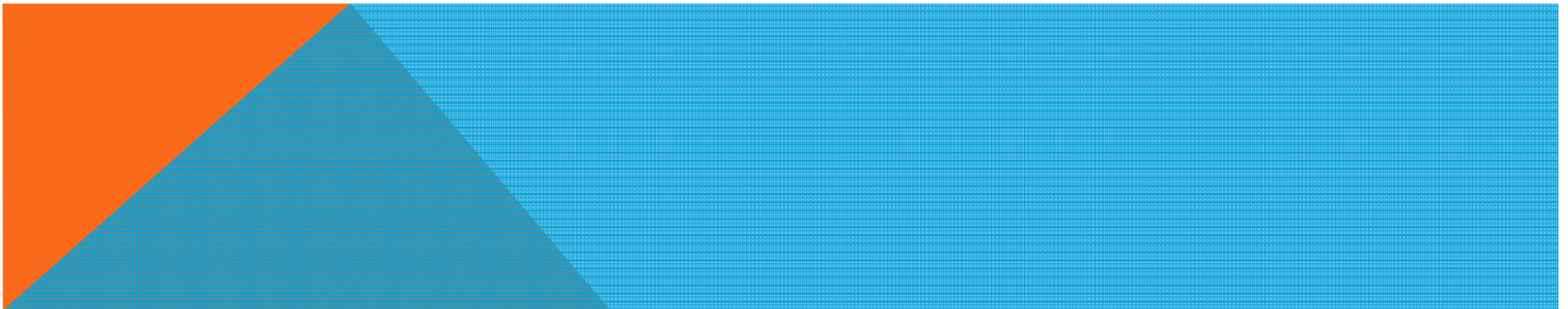
Discussion

- Lymph entrance to the gland may be direct, without involvement of the paraglandular lymph nodes, may be secondarily deposited from paraglandular lymph nodes, or may contaminate the system by retrograde extension from massive metastases in the neck



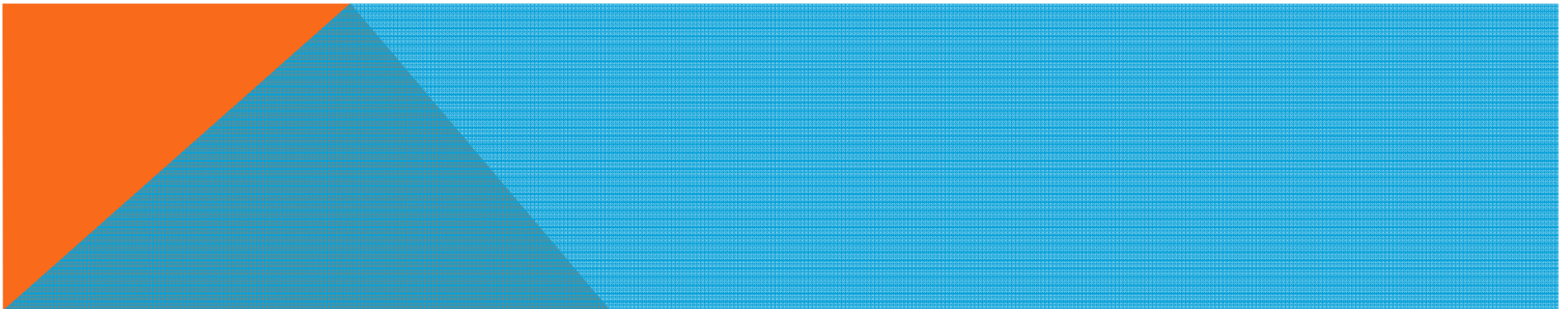
Discussion

- Clinically and pathologically, secondary spread to the parotid manifests itself as a primary salivary gland tumor that may mislead clinicians, radiologists and pathologists.



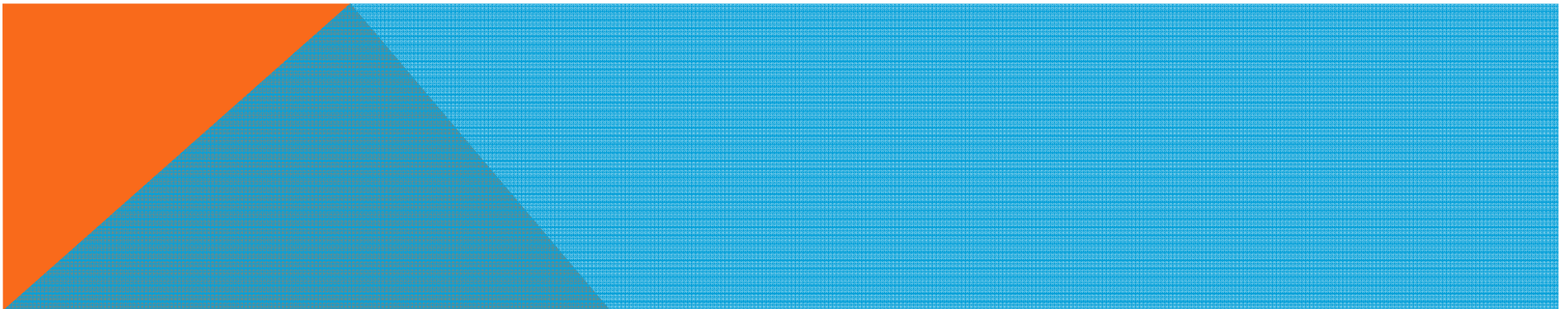
Discussion

- The cytological recognition of a thyroid metastasis to different body sites may pose a diagnostic difficulty, especially when a thyroid cancer presents initially at the metastatic site.



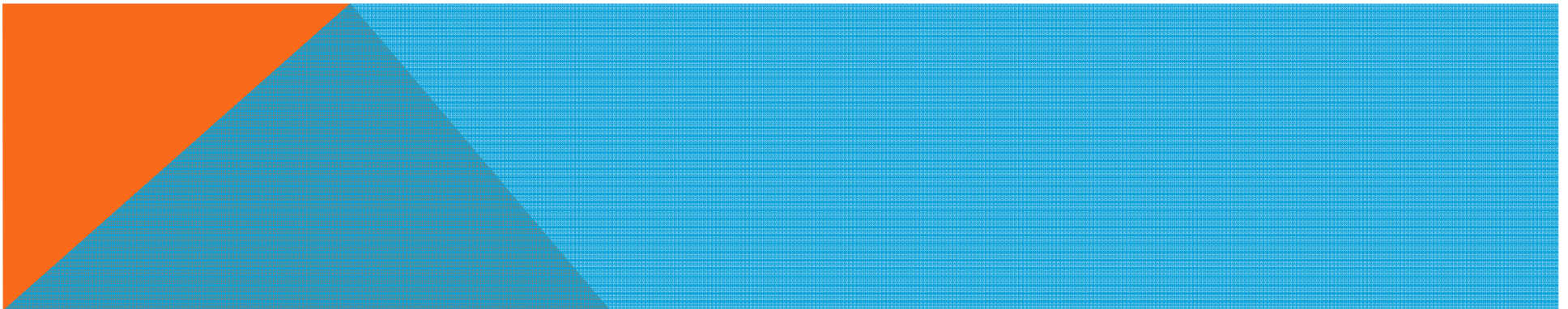
Discussion

- Immunohistochemical thyroglobulin positivity is a useful tool in distinguishing between a thyroid primary and other metastatic lesions, as this marker is specific for thyroid tumors



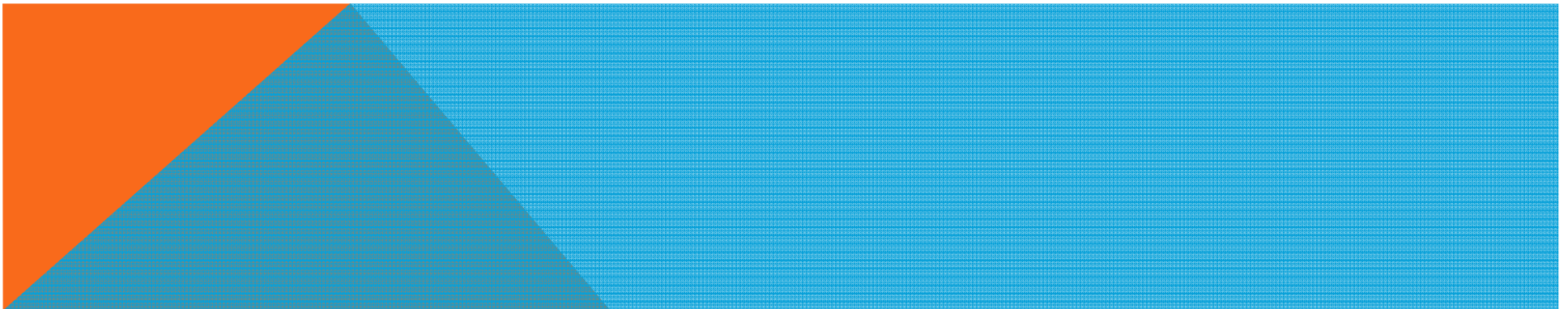
Conclusion

- This rare case of a thyroid follicular carcinoma presenting as a metastasis in the parotid gland serves to highlight the importance of remaining clinically vigilant to the possibility that a salivary gland lesion may be a metastasis from another site.



Conclusion

- This very rare presentation of a thyroid follicular carcinoma **could easily have been reported incorrectly as benign thyroid follicular cells** if there was poor communication and the reporting pathologist was not made aware that the initial aspirate was from the parotid gland and not from the thyroid gland.



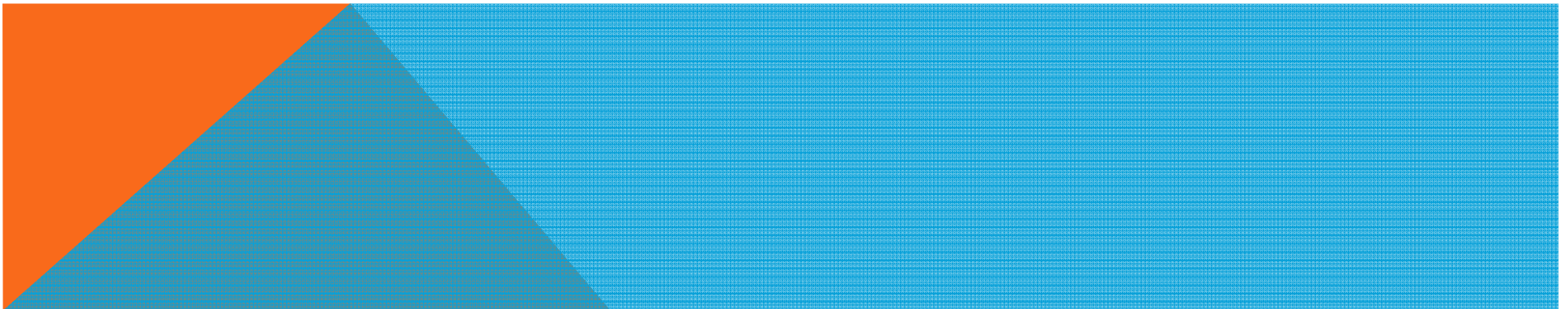
醫學倫理討論

Tom Beauchamp & James Childress
六(七)大原則 - 1979

1. 生命的神聖性 (Sanctity of life)
2. 行善原則 (Beneficence): 醫師要盡其所能延長病人之生命且減輕病人之痛苦。
3. 誠信原則 (Veracity): 醫師對其病人有「以誠信相對待」的義務。
4. 自主原則 (Autonomy): 病患對其己身之診療決定的自主權必須得到醫師的尊重。
5. 不傷害原則 (Nonmaleficence): 醫師要盡其所能避免病人承受不必要的身心傷害。
6. 保密原則 (Confidentiality): 醫師對病人的病情負有保密的責任。
7. 公義原則 (Justice): 醫師在面對有限的醫療資源時，應以社會公平、正義的考量來協助合理分配此醫療資源給真正最需要它的人。

生命的神聖性

- 強調尊重自己和他人生命，尊重生命的價值。



行善原則

- 做Excision 是否有助於病情的緩解？或是使病人更不舒服？
 - excision是綜合各項考量所做的決定，腫瘤的範圍以大到無法單純以保守治療的方式做解決，基於積極治療的考量我們希望可以盡快切除腫瘤部位。會盡量與病患做溝通並給於緩解治療，並持續觀察後續的病情。
- 是否考慮其他治療對病情有較好的預後？
 - 以目前西醫角度來說，擴長到這種範圍的腫瘤還是會建議切除，並加以做化放療控制轉移的機率，避免的事先做放療的夜長夢多，反而造成癌細胞有轉移的時間。

誠信原則

- 對於患者的疾病嚴重程度是否有確實地通知，盡到告知的義務？是否有清楚的向病人說明清楚疾病病程、治療計畫、預後、風險？
 - 皆以已告知病人後，經同意才進行手術。且病人心智狀態及法律上都具有行為能力。病程的意願部分為曾經猶豫是否進行手術，但在醫師的建議及說明之下，決定配合我們的治療計畫。

自主原則

- 充分說明病情及治療計畫、風險之後，是否有讓病人充分自主地選擇治療計畫？
 - 有給予病人及家屬選擇的自由及考慮的時間，最後的決定為病人出於自願同意並遵循醫師的建議。
- 在做全身麻醉以前，是否有說明完整之後再請病人自主的簽名同意？
 - 已充分說明並與家屬溝通。

不傷害原則

- 是否有先完整瞭解病人的病史？
→治療前有完整蒐集病史資料，並與病患溝通後擬定進一步的治療計畫
- 手術過程中，是否有造成不必要的醫源性的傷害？
→沒有不必要醫源性傷害。
- 進行手術是否能增進患者的生活品質？
→若手術及進程順利可幫助患者盡量回到平常生活，但不一定是增進患者生活品質。若不進行手術，以醫師的角度跟經驗之後患者的生活品質會每下愈況。

保密原則

- 告知的對象

1. 本人為原則
2. 病人未明示反對時，亦得告知其配偶與親屬
3. 病人為未成年人時，亦須告知其法定代理人
4. 若病人意識不清或無決定能力，應須告知其法定代理人、配偶、親屬或關係人
5. 病人得以書面敘明僅向特定之人告知或對特定對象不予告知

- 此次case是否遵循保密原則？

→ 患者對於每次病情報告都有積極了解，並無特殊不想告知的親屬及關係人，醫師每次看診皆會誠實討論，並在看診後遵循保密原則，不洩露個人資料財產。

公義原則

- 此次case 是否有資源分佈不均的問題影響臨床決定？
 - 病床及醫療資源優先給比較需要的病人，並盡力去照顧患者術後的虛弱及併發症。此次case並無受到太多或者太少的醫療照顧。
- 此次case是否有來自專業間及商業上的利益，在臨床治療病人時造成利益衝突？
 - 這次治療並無太多外力介入，在臨床治療上醫師也是根據自身的判斷給予治療計劃，並無利益衝突的情況產生。

醫學倫理總結

- 患者為多種系統性疾病的患者，對於比較積極侵入性的手術抱持態度一直處於保守及猶豫，以至於拖到患區生長到無法忽視時才來就診。對於這樣的病人我們應該多給於鼓勵，並清楚告知病情的進程及我們想要進行的治療計畫，如果可以也請家屬一同了解醫師想要努力的方向。但另一方面也必須尊重患者的意願，遵循保密及公義的原則，對於資源的分配不能被外界給影響，適時給予患者陪伴及關心，才能真正達到全人醫療的目的及醫療倫理的落實。

Reference

Oral and Maxillofacial Pathology, third edition

The background features a large orange shape on the right side and a blue shape on the left side. The blue shape is composed of two overlapping triangles: a larger one with a fine grid pattern and a smaller, solid one in front of it. The text is centered in the white space between the shapes.

**Thank you for
your attention**